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EXAMINER	
CHOUDHRY, SAMINA F	

ART UNIT	PAPER NUMBER
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/596,347	CAVIGLIA, DIEGO	
	Examiner	Art Unit	
	SAMINA CHOUDHRY	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/21/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nathan et al. (US 6295146), in view of Cleveland et al (US 2003/0112821).

Regarding claim 18, Nathan discloses

sending an Activate message (Col. 8, lines 54-56; command to OCCS) from a first transport network element (OCCS controller of Fig. 3) to a second transport network element (OCCS of Fig. 3; Col. 4, lines 58-62) to activate a secondary traffic circuit (316 of Fig. 3) that interconnects the first and second transport network elements (Col. 8, lines 30-42).

Nathan does not disclose sending a RevertRequest message from the first transport network element to the second transport network element to request deactivation of the secondary traffic circuit at the second transport element; and

sending a Revert message from the first transport network element to the second transport network element to indicate that the secondary traffic circuit has been deactivated at the first transport element responsive to receiving a RevertRequest message from the second transport network element.

In an analogous art, Cleveland discloses sending a RevertRequest message from the first transport network element to the second transport network element to request deactivation of the secondary traffic circuit at the second transport element (¶ 86, lines 9-10; base station 101 sends an IS-2001 message to base station 103 to deactivate the second supplemental channel);

and a Revert message to deactivate the secondary traffic circuit responsive to receiving a RevertRequest message from the first transport network element to the second transport network element to indicate that the secondary traffic circuit has been deactivated at the first transport element responsive to receiving a a RevertRequest message from the second transport network element (¶ 86; lines 10-15; Base station 101 send an ESCAM message that the supplemental channel will be deactivated).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan's method to add

sending a RevertRequest message from the first transport network element to the second transport network element to request deactivation of the secondary traffic circuit at the
second transport element; and

sending a Revert message from the first transport network element to the second transport network element to indicate that the secondary traffic circuit has been deactivated at the first transport element responsive to receiving a RevertRequest message from the second transport network element, as taught by Cleveland.

The motivation as mentioned in Cleveland is to efficiently use the available bandwidth of a multichannel system (¶ 17, lines 1-3).

2. Claims 8-17 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nathan et al. (US 6295146), in view of Cleveland et al (US 2003/0112821), and further in view of Egoshi et al. (US 6163526).

Regarding claims 8, Nathan discloses:

a traffic selector (OCCS of Fig. 3; Col. 4, lines 48-49) to switch a transport network element between listening to network traffic received over a primary traffic circuit (202 of Fig. 3) and listening to network traffic received over a secondary traffic circuit (316 of Fig. 3; Col. 4, lines 34-47);

an agent to (OCCS controller of Fig. 3) switch the traffic selector between the primary traffic circuit and the secondary
traffic circuit, and to exchange messages with a remote agent (switching table 600 of Fig. 6) associated with a remote transport network element to control activation and deactivation of the secondary traffic
circuit (Col. 7, lines 18-32; Col. 4, lines 52-62; coupling and decoupling), the messages comprising:
an Activate message (Col. 8, lines 54-56; command to OCCS) to activate the secondary traffic circuit and to communicate the completion of the secondary traffic circuit activation to the remote agent (Col. 8, lines 20-29; status message for ring element A informs ring element A spare channel 554 is coupled);

Nathan does not explicitly disclose a split module to send output traffic either to the primary traffic circuit or to the secondary traffic circuit; and a RevertRequest message to request the remote agent to deactivate a previously activated secondary traffic circuit; and

a Revert message to deactivate the secondary traffic circuit responsive to receiving a RevertRequest message from the remote agent.

In an analogous art, Cleveland discloses a RevertRequest message to request the remote agent to deactivate a previously activated secondary traffic circuit (¶ 86, lines 9-10; message to deactivate the

second supplemental channel); and a Revert message to deactivate the secondary traffic circuit responsive to receiving a RevertRequest message from the remote agent (¶ 86; lines 10-15; ESCAM message that the supplemental channel will be deactivated).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan's system to have a RevertRequest message to request the remote agent to deactivate a previously activated secondary traffic circuit; and a Revert message to deactivate the secondary traffic circuit responsive to receiving a RevertRequest message from the remote agent, as taught by Cleveland.

The motivation as mentioned in Cleveland is to efficiently use the available bandwidth of a multichannel system (¶ 17, lines 1-3).

Nathan in view of Cleveland fails to disclose a split module to send output traffic either to the primary traffic circuit or to the secondary traffic circuit;

In an analogous art, Egoshi discloses a split module (Col. 2; lines 43-44; selector 112) to send output traffic either to the primary traffic circuit or to the secondary traffic circuit (Col. 27, lines 1-10; Col. 2, lines 43-48 output frame on the working channel line or on the protection channel line).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Cleveland 's system to have a split module to send output traffic either to the primary traffic circuit or to the secondary traffic circuit, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 9, Nathan in view of Cleveland and further in view of Egoshi discloses that the agent is configured to detect a failure at an input of the primary traffic circuit (Nathan; Col. 7, lines 18-23).

Regarding claim 10, Nathan in view of Cleveland and further in view of Egoshi discloses that responsive to the agent detecting the failure (Nathan; Col. 7, lines 18-23), the agent is configured to switch the traffic selector to receive the network traffic over the secondary traffic circuit (Nathan; Col. 1, lines 55-62) and send the Activate message if the secondary traffic circuit is not already activated (Nathan; Col. 8, lines 50-56; command to OCCS).

Regarding claims 11 and 22, Nathan in view of Egohsi does not explicitly disclose that the agent is further configured to detect that the failure no longer exists; switch the sub-network connection protection mechanism to the NoRequest status; and to switch the traffic selector to receive the network traffic over the primary traffic circuit and send the RevertRequest message to the remote agent/the second transport network element responsive to the detection.

In an analogous art, Cleveland discloses that the agent is further configured to detect that the failure no longer exists; switch the sub-network connection protection mechanism to the NoRequest status (¶ 91, lines 1-6); and to switch the traffic selector to receive the network traffic over the primary traffic circuit (Cleveland; ¶ 75, lines 9-13) and send the RevertRequest message to the remote agent responsive to the detection (Cleveland; ¶ 86, lines 8-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Egoshi 's system to have that the agent is further configured to detect that the failure no longer exists switch the sub-network connection protection mechanism to the NoRequest status; and to switch the traffic selector to receive the network traffic over the primary traffic circuit and send the RevertRequest message to the remote agent/the second transport network element responsive to the detection, as taught by Cleveland.

The motivation as mentioned in Cleveland is to efficiently use the available bandwidth of a multichannel system (¶ 17, lines 1-3).

Regarding claims 12 and 23, Nathan in view of Egohsi does not explicitly disclose that the agent is further configured to receive a RevertRequest message from the remote agent/at the first transport network element from the second transport network element, and reply to the remote agent by sending the Revert message to tear-down the secondary traffic circuit if the traffic selector is already switched to receive the network traffic on the primary traffic circuit/sending a revert message to the second transport network element to deactivate the secondary traffic circuit if the sub-network connection protection mechanism is in the NoRequest status.

In an analogous art, Cleveland discloses the agent is further configured to receive a RevertRequest message from the remote agent (Cleveland; 850 of Fig. 8), and reply to the remote agent by sending the Revert message to tear-down the secondary traffic circuit/ sending a revert message to the second transport network element to deactivate the secondary traffic circuit (Cleveland; 860 of Fig. 8) if the traffic selector is already switched to receive the network traffic on the primary traffic circuit

/if the sub-network connection protection mechanism is in the NoRequest status (Cleveland; 870 of Fig. 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Egoshi 's system to have that the agent is further configured to receive a RevertRequest message from the remote agent/at the first transport network element from the second transport network element, and reply to the remote agent by sending the Revert message to tear-down the secondary traffic circuit if the traffic selector is already switched to receive the network traffic on the primary traffic circuit/sending a revert message to the second transport network element to deactivate the secondary traffic circuit if the sub-network connection protection mechanism is in the NoRequest status.

The motivation as mentioned in Cleveland is to efficiently use the available bandwidth of a multichannel system (¶ 17, lines 1-3).

Regarding claims 13, 14 and 15, Nathan in view of Cleveland does not disclose that the agent comprises logic to implement a sub-network connection protection mechanism having a NoRequest state/ the logic entering the NoRequest state indicates that no failure is detected at the input of the primary traffic circuit and that the traffic selector is switched to

receive the network traffic over the primary traffic circuit and a AutoSwitch state.

In an analogous art, Egoshi discloses that the agent comprises logic to implement a sub-network connection protection mechanism having a NoRequest state (Col. 6, lines 38-45; if there is no channel line failure then no signal is sent to indicate a failure) / the logic entering the NoRequest state indicates that no failure is detected at the input of the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the primary traffic circuit (Col. 8, lines 32-39; Col. 2, lines 40-47; if there is no failure then the selector will select the working channel i.e. primary traffic circuit) and a AutoSwitch state/ wherein the logic entering the AutoSwitch state
indicates that a failure has been detected at the input to the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the secondary traffic circuit (Col. 4, lines 10-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Clevelnad 's system to have that the agent comprises logic to implement a sub-network connection protection mechanism having a NoRequest state/ the logic entering the NoRequest state indicates that no failure is detected at the input of the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the primary traffic circuit and a

AutoSwitch state/ wherein the logic entering the AutoSwitch state indicates that a failure has been detected at the input to the primary traffic circuit and that the traffic selector is switched to receive the network traffic over the secondary traffic circuit, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claims 16 and 24, Nathan in view of Cleveland does not disclose that the agent is configured to switch the sub-network connection protection mechanism to the NoRequest State responsive to receiving a Revert message from a remote agent/the second network element.

In an analogous art, Egoshi discloses that the agent is configured to switch the sub-network connection protection mechanism to the NoRequest State responsive to receiving a Revert message from a remote agent/the second network element (Col. 4, lines 15-17; traffic is output on primary traffic circuit in response to the alarm indication received by the control unit, if alarm does not show any failure then traffic is output to the working channel).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Clevelnad 's system to have that the agent is configured to switch the sub-

network connection protection mechanism to the NoRequest State responsive to receiving a Revert message from a remote agent/the second network element, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 17, Nathan in view of Cleveland does not disclose an Synchronous Digital Hierarchy (SDH) transport network.

In an analogous art, Egoshi discloses a Synchronous Digital Hierarchy (SDH) transport network (Abstract, lines 1-2; SDH).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Clevelnad 's system to have a Synchronous Digital Hierarchy (SDH) transport network.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 19, Nathan in view of Cleveland discloses:

detecting a failure at an input to a primary traffic circuit associated with the first transport network element (Nathan; Col. 7, lines 18-23),;

activating a sub-network connection protection mechanism at the first transport network element responsive to detecting the failure (Nathan; Col. 1, lines 55-62; Col. 8, lines 50-56; command to OCCS), the sub-network connection protection mechanism assuming:

Nathan in view of Clevelnad does not explicitly disclose a NoRequest state to indicate that no failure is detected at the primary traffic circuit, and that the first transport network element is configured to receive network traffic over the primary traffic circuit; and

an AutoSwitch state to indicate that a failure has been detected at the primary traffic circuit, and that the first transport network element is configured to receive the network traffic over the secondary traffic circuit.

In an analogous art, Egoshi discloses:

a NoRequest state (Col. 6, lines 38-45; if there is no channel line failure then no signal is sent to indicate a failure to indicate that no failure is detected at the primary traffic circuit and that the first transport network element is configured to receive the network traffic over the primary traffic circuit (Col. 8, lines 32-39; Col. 2, lines 40-47; if there is no failure then the selector will select the working channel i.e. primary traffic circuit) and an AutoSwitch state to indicate that a failure has been detected at the

primary traffic circuit and that first transport network element is configured to receive the network traffic over the secondary traffic circuit (Col. 4, lines 10-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Clevelnad 's method to have a NoRequest state to indicate that no failure is detected at the primary traffic circuit, and that the first transport network element is configured to receive network traffic over the primary traffic circuit; and an AutoSwitch state to indicate that a failure has been detected at the primary traffic circuit, and that the first transport network element is configured to receive the network traffic over the secondary traffic circuit, as taught by Egoshi.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Regarding claim 20, Nathan in view of Cleveland and further in view of Egoshi discloses activating a sub-network connection protection mechanism comprises generating the sub-network connection protection mechanism if the sub-network connection protection mechanism does not already exist (Nathan; Col. 8, lines 50-56; command to OCCS to activate secondary traffic circuit).

Regarding claim 21, Nathan in view of Cleveland does not disclose

switching the sub-network connection protection mechanism to the AutoSwitch state responsive to detecting an error;

switching a traffic selector at the first network element to receive the network traffic over the secondary traffic circuit; and sending the Activate message.

In an analogous art, Egoshi discloses switching the sub-network connection protection mechanism to the AutoSwitch state

switching the sub-network connection protection mechanism to the AutoSwitch state responsive to detecting an error (Col. 3, lines 25-35 and Col. 4, lines 10-22; in response to alarm indication, control unit control the selector to out the frame on the protection channel);

switching a traffic selector at the first network element to receive the network traffic over the secondary traffic circuit; and sending the Activate message (Col.4, lines 23-41; sending alarm indication).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify Nathan in view of Clevelnad 's method to have switching the sub-network connection protection mechanism to the AutoSwitch state responsive to detecting an

error; switching a traffic selector at the first network element to receive the network traffic over the secondary traffic circuit; and sending the Activate message.

The motivation as mentioned in Egoshi is to avoid instantaneous cutoff when one of the two channel lines has failed (Col. 1, line 21-23).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMINA CHOUDHRY whose telephone number is (571)270-7102. The examiner can normally be reached on Monday to Thursday (7:30 a.m. to 5.00p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571)272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/
Primary Examiner, Art Unit 2416

SC

08/8/2009